U.S. Department of the Interior
Bureau of Land Management

Las Vistas de Questa Trails

DOI-BLM-NM-F020-2010-026-EA

U.S. Department of the Interior
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Chapter 1: Introduction

1.1 Background

The Village of Questa (Village) has met several times with the Bureau of Land Management's Taos Field Office recreation staff (BLM) about steps that could be taken to position the Village as a gateway to the Wild Rivers Recreation Area (Wild Rivers), and to the proposed Rio Grande del Norte National Conservation Area. In these early talks, both BLM and the Village agreed that the trails should be for a mix of non-motorized uses (hiking, biking, equestrian). When it became clear that Chevron Mining would be willing to grant a right-of-way to the Village for a trail head and the initial portion of a trail into the Guadalupe Mountains, the BLM and the Village agreed to become partners to develop a non-motorized trail that could become the beginning of a larger system in the Guadalupe Mountains and the existing Wild Rivers trail system.

1.2 Purpose and Need for Action

Developing Las Vistas de Questa trail or system of trails would help provide residents of the area an easy entry point into the Guadalupe Mountains and Wild Rivers, promoting outdoor recreation, maintaining or improving individual health, providing an opportunity for socializing, and providing some new opportunities for local business.

The proposed action is the construction of a trail from the Village of Questa to Wild Rivers Recreation Area. This non-motorized trail would provide users with the opportunity for hiking, mountain biking or horseback riding removed from noise of road traffic, with a diversity of terrain and excellent long-range views of the Sangre de Cristo Mountains and the river corridor.

The proposed trail lies within the Wild Rivers Recreation Area and is managed by the BLM's Taos Field Office. The proposed trail is located within T29N, R12E, sections 21, 26, 27, and 28.

1.3 Land Use Plan Conformance

The proposed action is consistent with the Taos Resource Management Plan (1988, as amended), the Rio Grande Corridor Plan (2000), and the Village of Questa Comprehensive Development Plan. The Taos RMP and the Rio Grande Corridor Plan allocated the public lands in Wild Rivers Recreation Area primarily for outdoor recreation use. The Rio Grande Corridor Plan did not make specific reference to the proposed Las Vistas de Questa Trail, but also did not rule out new trail development. The proposed trail was designed in conformance with Bureau standard specifications for recreational trails.

1.4 Identification of Issues

A scoping meeting/workshop was held in Questa on April 14, 2010. Village officials, three members of the public and BLM staff identified the following concerns or opportunities which this EA addresses:

1.4.1 Recreation: ***Would the trail accommodate hiking, biking, and equestrian use, or could some trail segments be developed to separate users and reduce potential conflicts, or provide a better opportunity for a particular type of use?***

1.4.2 Cattle Grazing: ***What impacts could occur to cattle grazing in an allotment which the proposed trail would go through?***

1.4.3 Cultural Resources: ***How would trail affect cultural resources?***

1.4.4 Hunting Opportunities: ***How would opportunities to hunt on Guadalupe Mountain be affected--will creation of a trail system mean closing more of this area to hunting?***

1.4.5 Wildlife: *What affect would trail use have on big game wildlife species and their habitat?*

1.4.6 Economic Development: What ***economic opportunities would this proposed trail provide to the residents in and around Questa?***

1.4.7 Vegetation/Noxious Weeds: *How might the trail affect vegetation and provide for the spread noxious weeds?*

1.4.8 Migratory Birds: *What affect would trail use have on migratory bird species and their habitat?*

Chapter 2: Description of Alternatives

2.1 Alternative A: Proposed Action

The trail linking Questa with the existing Wild Rivers Recreation Area trail system would be about six miles long, with an elevation gain of about 550 feet. A two-acre parking area and trailhead would be built in partnership with the Village of Questa, BLM, and Chevron Mining on Chevron Mine property being leased to the Village. The trailhead will initially provide parking for 12 cars or small trucks, and up to six trucks with trailers or buses; later construction will include a vault toilet and covered picnic tables. The first 6/10th mile of the trail from this eastern trailhead would continue west in a 40-foot wide corridor included in the Chevron Mine lease to the Village, until it enters the Wild Rivers Recreation Area administered by the BLM. A walk-through panel and/or a 4 foot horse gate would be placed on the fence line along allotment boundaries. Please refer to the map of the project area at the end of this document.

The initial BLM trail segment from the eastern trailhead would be about one mile in length and would end at the top of *Punto del Coyote*, a small knoll on the east side of Guadalupe Mountain. Users would be given an option to return by another route about 1/2 mile long on the north side of *Punto del Coyote*. The first one mile of the trail would be three to four feet wide to allow for users to walk side by side. Overhead vegetation would be trimmed to provide for equestrian use. Two short routes have been identified that could be used by horses or other users, following some existing two-track routes. These side trails are about 1/4 mile in total length.

The trail would continue west from the base of *Punto del Coyote* for about another five miles, ending at the Red River Fault Trail and the access road to Guadalupe Mountain Trailhead.

The trail system would be available for a variety of commercial activities, such as guided horseback riding, mountain biking, or hiking; and for special events such as races.

Trail construction would adhere to the following specification:

1. Minimal trail maintenance structures would be installed as needed (i.e. water bars, check dams, cairns, and cribbing). Gradient dips would be used to minimize the amount of structures required for adequate water drainage and resource protection.
2. Finished tread width of the trail would range from 24-36 inches, suitable for hiking, mountain biking and equestrian use.
3. Barriers would be installed at trailheads to prevent motorized vehicle use of the trail.
4. Trailhead signs would be installed notifying users of trail information and regulations.
5. A cultural clearance has been completed out to 50 feet from the center line of the proposed trail to be built in 2010; nothing of significance was found. For the remainder of the trail, a similar clearance would be conducted before trail construction would start, and the built trail would be routed away from archaeological sites identified through clearance, with sufficient distance to ensure site protection.
6. Standard field tools would be used for trail construction: Pulaski, shovel, rock bar and chain saw.
7. The entire trail would be routed to have no segment steeper than a 12% grade. Maximum elevation gain would be roughly 550 feet to the top of Punto del Coyote.
8. No trees over five feet would be removed from the proposed trail route (the trail would be routed around large trees). It is anticipated that some light pruning of existing trees would be required. Only sagebrush or ground-cover grasses would be removed for trail construction.
9. Pruning of trees or removal of sagebrush/ground-cover grasses would occur in the non-migratory breeding bird season (October through March), or, alternatively, nest searches would be conducted by a Taos BLM wildlife biologist, or their designee, prior to any vegetation removal.

It is expected that the Rocky Mountain Youth Corps, BLM fire crew and seasonal hires would be used in the construction of the trail, with direct supervision by BLM staff. Construction would be completed on the first three miles of trail by the fall of 2010. If funds are available, the remaining three miles would be built in 2011 or 2012.

2.2 Alternative B: No Action

Under the No-Action Alternative the trail described in this proposal would not be constructed.

2.3 Alternative Considered but Dismissed from Detailed Analysis

The objective of this project is to link the Village of Questa and Wild Rivers Recreation Area with a multiple-use single track trail. However, it is reasonably forseeable that a larger trail system would be developed which could provide for separate recreational uses. Separate uses will be considered as part of the larger trail system to minimize any potential conflicts between recreational uses.

Chapter 3: Affected Environment

Wild Rivers Recreation Area provides access for a variety of activities including camping, hunting, fishing, bird-watching, hiking, biking, equestrian use and general sightseeing. Land ownership within the recreation area is predominantly BLM, with some state land. The proposed action includes a two acre trailhead and a 6/10 mile trail corridor 40 feet wide on Chevron Mining property which has been leased to the Village of Questa for this trail. Predominate vegetation in the project area is big sagebrush and piñon-juniper woodland. Grass species observed during trail reconnaissance include blue grama and ring muhly. Topography along the proposed trail is varied with slopes ranging from 0-20%.

3.1 Recreation

In 2009, there were 13,500 recorded visits at Wild River Recreation Area. Currently there is limited recreation activity by visitors on the east side of Guadalupe Mountain, since public access is blocked by private lands. Current users (primarily nearby residents) access the area, but these visits are likely less than 1,000 per year. There are multiple two track roads that are frequently used by off-highway vehicles (OHVs) or all-terrain vehicles (ATVs). While this use is not authorized, it does occur frequently.

3.2 Cattle Grazing

The completed trail would cross grazing allotments # 608 and # 640. Livestock are kept in the allotments on a seasonal basis. Allotment # 608 has 210 Animal Unity Months (AUMs) and the season is from May 1 to July 31. On allotment # 640, 145 AUMs are authorized, with the season running from August 25 to September 30.

3.3 Cultural Resources

Cultural sites are common throughout Guadalupe Mountain. Eleven archaeological sites were located, recorded and excavated by archaeologists from the Office of Archaeological Studies, University of New Mexico in the 1980s as part of the proposed Molycorp tailings pond project. This project demonstrated that "the prehistoric archaeological record on Guadalupe Mountain spanned from the late Paleoindian (ca. 7500 BC) through the Archaic (5500BC-AD 400) and extended into the late Puebloan period (ca. AD 1500)"(Seaman and Chapman, piii). The fine-grained basalt, found abundantly on the mountain, was a preferred material for stone-tool making in prehistoric times. Basalt flakes, mainly debitage from the tool making process, are found scattered over the entire mountain.

3.4 Hunting Opportunities

The area has numerous game trails over the Guadalupe Mountain on both sides of the proposed trail. Currently hunters need to acquire permission from private land owners to access Guadalupe Mountain from the east side; however, there is currently access for the public from within the Recreation Area. Hunting season for big game starts on September 1, 2010 and continues through January15, 2011 in big game unit 53. There are no restrictions on hunting in this portion of Wild Rivers Recreation Area; the area south of the Sheep's Crossing picnic area is closed to both hunting and target shooting.

3.5 Wildlife

Wildlife is abundant and diverse throughout the project area, which is valued for its big game winter range and high density of nesting raptors along the Rio Grande Gorge. A wide range of large and small mammals can be found, including Rocky Mountain elk, Rocky Mountain bighorn sheep, mule deer, black bear, and mountain lion, as well as various bat species, skunk, fox, coyote, bobcat, chipmunks, pocket gophers, Gunnison's prairie dogs, various mice and rat species, porcupine, cottontail, and jackrabbit. Avian species are varied and include, among others, turkey vulture, piñon jay, Western meadowlark, mourning dove, black-billed magpie, and mountain chickadee. Various reptiles, amphibians, and insects can also be found in this habitat.

The area is located in the Intermountain Basins Big Sagebrush Shrubland and Rocky Mountain Montane Mixed Conifer Forest and Woodland, key wildlife habitat types as identified in the Comprehensive Wildlife Conservation Strategy of the New Mexico Department of Game and Fish (2005). Existing habitat includes piñon-juniper woodlands, open prairie, arroyo areas and small patches of coniferous forest.

The area contains winter range and a migratory corridor for elk and mule deer. Winter range is considered the most limiting habitat type for elk and mule deer, and includes sagebrush-steppe, piñon-juniper woodlands, mountain shrub, and ponderosa pine below 7,500 feet. In northern New Mexico, mule deer become concentrated on winter ranges with densities of 20-100 deer per /square mile in suitable habitat (Watkins and Bishop et al. 2007). Winter ranges are critical because these areas support higher densities of mule deer and elk on less available forage, are less tolerant of high herbivory rates, are prone to non-native weed invasion, and are potential areas for development of energy, minerals or residential subdivisions.

3.6 Economic Development

Due to the lack of public access to Guadalupe Mountain from the Village of Questa, growth of local business opportunities to support recreation activities, such as bike rentals or guide services has been limited. Visitors driving through Questa to visit the developed part of Wild Rivers Recreation Area provide some support to local business such as gas stations, restaurants, or the local grocery.

3.7 Vegetation/Noxious Weeds

Elevations range from approximately 7,642 feet at the trail head to 8,380 feet at the highest point of the trail. Annual precipitation is approximately 16 inches with the majority of accumulation in late summer. Sagebrush steppe and piñon juniper woodland communities dominate the area. The dominant understory species consist of blue grama, western wheatgrass, needle and thread, and Indian rice grass. Riparian communities are located along the Rio Grande, and a few scattered aspen stands also occur in higher elevations.

For the most part, the composition of understory vegetation has been affected by the predominance of big sagebrush. Through much of the project area the sagebrush is fairly dispersed and generally occurs in dense stands making up a majority of the vegetation in this area, along with piñon-juniper woodlands.

Isolated thistle currently occurs in small disturbed areas near the proposed trail. The most prevalent non-native vegetation found in the area is cheatgrass. Other noxious weeds that are known to occur include foxtail barley, burdock, and yellow toadflax.

3.8 Migratory Birds

Migratory bird species of conservation concern (BLM Interim Management Guidance 2008-050) that have the potential to occur within the project area include burrowing owl, prairie falcon, golden eagle, olive-sided flycatcher, Virginia's warbler, loggerhead shrike, mourning dove, piñon jay, Brewer's sparrow, and sage sparrow.

The piñon-juniper community supports Gray flycatchers, Juniper titmice, Bewick's wrens, and Black-throated gray warbler. Gray flycatchers, Juniper titmice, and Bewick's wrens prefer woodlands with high overstory juniper cover. The Juniper titmouse is associated with senescent trees, and the Black-throated gray warbler with piñon pines. Piñon jays are a piñon pine obligate that nest in loose colonies.

Sagebrush plants provide nest sites and cover from wind and predators, harbor insects for insect-eating wildlife, and are the main food for deer in the winter. Bird species of concern that nest in sagebrush shrubs include the sage thrasher, Brewer's sparrow, sage sparrow, green-tailed towhee, loggerhead shrike, gray flycatcher, and occasionally Swainson's hawk.

Chapter 4: Environmental Effects

4.1 Direct and Indirect Effects

4.1.1 Alternative A: Proposed Action

4.1.1.1 Recreation

Recreational use of the Guadalupe Mountain area would increase; within five years, use levels could possibly exceed 5,000 per year. The trail would enhance the quality of the experience of all outdoor users with many hiking, biking, equestrian, wildlife viewing and hunting opportunities. Equestrian users would be able to access other two-track roads to avoid conflict with hikers or cyclists in the area. This trail would add approximately six more miles of trail to the existing 25 mile network within the Wild Rivers Recreation Area.

4.1.1.2 Cattle Grazing

The proposed trail route would not affect cattle grazing in the area. The proposed route is a fair distance from the grazing pastures in the two allotments in the project area. A walk-through panel and/or a 4 foot wide horse gate would be placed on the fence line along allotment boundaries. There have not been complaints from visitors or permittees regarding user conflicts on an adjacent allotment (# 606) where similar trails have been in use for several years.

4.1.1.3 Cultural Resources

The proposed trail route was inventoried by Paul Williams, the Taos Field Office Archaeologist, on May 18, 2010. A few isolated basalt flakes were located, but no archaeological sites were found. Therefore there will be no effect on cultural resources from the construction and use of the trail.

4.1.1.4 Hunting Opportunities

Creation of this trail system would not mean closing more of this area to hunting. All hunting activities would conform to the New Mexico Department of Game and Fish hunting proclamation. Proposed trails are routed away from dirt water-tanks and water-catchment areas that large game would use. The saddle area of the Guadalupe Mountain has heavy hunting pressure during the October hunts and light use for the rest of hunts.

4.1.1.5 Wildlife

The proposed action would disturb approximately three acres of wildlife habitat by removal of soil/vegetation/mineral material to use as part of a trail system. The removal of vegetation will slightly decrease the production of grasses and forbs for forage opportunities for deer, elk, and small mammals; remove nesting habitat for birds; and result in the loss of habitat for insect populations which many bird species require for food. Increased human use in the area could result in further fragmentation of habitat, moving big game species further from the area as disturbance levels rise. Forage and cover opportunities could decrease as recreation increases in the area. The addition of another trail in the area serves to

increase fragmentation of existing habitat, reducing habitat quality for large mammals that require large core areas for hiding, resting and foraging.

The short term effects of the proposed management action on wildlife populations include disturbance from removal of vegetation and installation of trail features. Due to the small amount of habitat loss from vegetation removal (three acres), and the large amount of similar habitat in the region, there would be minimal direct adverse impacts to wildlife from the proposed action, however, long-term indirect impacts from increased fragmentation could somewhat preclude the use of the area depending on the timing, frequency and duration of recreational use.

4.1.1.6 Economic Development

With the completion of the trail, opportunities for local businesses to rent mountain bikes, or to provide guided horseback rides or hikes would increase. Competitive outdoor sports, such as, cross-country races, or trail riding, would be allowed in the area. Increased visitors to the area could boost other service industries in Questa and surrounding communities.

4.1.1.7 Vegetation/Noxious Weeds

The proposed action will remove or disturb roughly three acres of vegetation in the location of the proposed trail.

Any time soil disturbance occurs the possibility of noxious weed invasion also occurs, as resources are freed. The proposed action would not pose additional risks of introduction or spread of noxious weeds beyond those already occurring. Under the proposed action, weeds could be introduced by equipment used to create or maintain the trail, or recreational activities themselves. The primary long term indirect effect of the proposed action would be maintenance of the existing native-steppe, native grasses, herbaceous recover, and wildlife habitat communities.

Disturbed sites containing non-native invasive species may experience a short term increase in these species following trail construction. This indirect effect could result from the increased light and water made available from eliminating competing sagebrush or overstory vegetation. The proposed project areas with intact grassland communities and warmer, moister climate should not experience the weed flush. BLM staff observations on similar treatments in the areas nearby found no detectible increases in knapweed establishment outside previously disturbed sites.

Pre- and post-treatment inventories to locate and treat any newly discovered weeds would help reduce the risk of noxious weed establishment and may result in the discovery and control weeds which have not yet been detected in this area.

4.1.1.8 Migratory Birds

By increasing access by recreationists to important wildlife habitats, there could be a decrease in vegetative diversity and nonnative invasive vegetation that may negatively affect local macroinvertebrate populations, resulting in a decrease in the avian prey base, indirectly affecting migratory birds in and adjacent to the project areas.

The proposed action could increase disturbance and fragmentation to the following habitats which support local wildlife populations: grasslands, shrub-lands, piñon-juniper forests, ponderosa pine forests, and mixed conifer forests.

Potential impacts to individual birds are possible due to the pruning and removal of vegetation for trail construction, including noise and human disturbance and the destruction of eggs, nests or nesting habitat. If project activities occur between the months of October through March, there would be no potential of adverse impacts to individual migratory birds.

Because the site specific project areas would be small, and there is abundant habitat of a similar type in the region, there will be negligible impacts to migratory bird populations as a whole.

Therefore, the proposed action has the potential to have a negative effect upon individual birds, eggs, young and/or the nesting habitat of ground nesting birds, however, it is unlikely there would be a noticeable impact to the populations of this or any other species of conservation concern.

4.1.2 Alternative B: No Action

4.1.2.1 Recreation

There will continue to be limited recreation activities (hiking, biking, hunting, etc) by visitors in the Guadalupe Mountain due to inaccessibility. Current users have to get permission from private land owners to access the area.

4.1.2.2 Cattle Grazing

Seasonal livestock grazing on the grazing allotments will continue to be managed by the BLM Taos Field Office.

4.1.2.3 Cultural Resources

Since the trail would not be developed, there would be no impact on cultural resources.

4.1.2.4 Hunting Opportunities

There will be limited hunting access from the east side of the Guadalupe Mountains due to private landownership and lack of a public entry portal to the area. There will continue to be random intrusions into the Guadalupe area from nearby residents, or hunters accessing the area from the west.

4.1.2.5 Economic Development

There will not be additional economic benefits to the local economy due to limited acessability to the Guadalupe Mountain from the Questa side.

4.1.2.6 Wildlife

Under the no action alternative, there would be no disturbance to big game or wildlife habitat along the proposed trail corridor, but recreationists would continue to roam the area on old trails or cross country.

4.1.2.7 Vegetation/Noxious Weeds

No direct effects to vegetation or noxious weeds would result under the No Action alternative.

4.1.2.8 Migratory Birds

Under the no action alternative, there would be no disturbance to migratory birds by recreationists or equipment to create or maintain the trail.

4.2 Cumulative Effects Analysis

The primary disturbance factor within the region has been historical grazing with subsequent habitat conversion. The area has been affected by habitat fragmentation and conversion due to urban, residential, commercial, and recreational activities and development. The future effects of these developmental factors may increase as human populations in the area continue to grow.

BLM land comprises roughly 18 % of the area within the Upper Rio Grande watershed. (Percentages are relative to lands within the Taos Field Office.) With a total of three acres of disturbance, there would be no significant cumulative impacts. Livestock grazing and recreation are only a couple of several disturbance activities within the area, and with the increase in trails, distribution of wildlife and livestock will be further influenced.

4.2.1 Cumulative Actions

4.2.1.1 Past and Present Actions

A network of over 25 miles of hiking and biking trails has been developed at Wild Rivers Recreation Area. The new trail will add about six miles to the non-motorized trail system of the Recreation Area.

4.2.1.2 Reasonably Foreseeable Actions

Within the near future, a larger trail system could be developed on the Guadalupe Mountain linking the communities of Questa, Cerro and the Red River Fish Hatchery to Wild Rivers Recreation Area.

4.2.2 Cumulative Effects

4.2.2.1 Recreation

About six miles of new trail will increase the developed trail network of Wild Rivers by 20%. New opportunities for trail enthusiasts, particularly from Cerro and Questa, will be made available. The new trail system will allow users of Wild Rivers to be more dispersed, maintaining an opportunity for solitude.

4.2.2.2 Cattle Grazing

No cumulative effects to cattle grazing.

4.2.2.3 Cultural Resources

No cumulative effects to cultural resources.

4.2.2.4 Hunting Opportunities

No cumulative effects to hunting opportunities.

4.2.2.5 Economic Development

Slight positive contributions to local economic development.

4.2.2.6 Wildlife

While speculative at this point, if trails continue to proliferate in the area, there could be indirect and cumulative impacts to wildlife from increased noise, pollution, human disturbance or vegetation removal. The project covers a small area (three acres) of BLM land base that is highly valued for existing wildlife populations. Some of the special status species that occupy this area are of high economic and cultural value and include elk, deer, bighorn sheep, raptors, prairie dogs and migratory birds. Over the years, increased development has fragmented the habitat; but overall recreation use at Wild Rivers has actually declined over the past 15 years. The degree of habitat fragmentation depends as much on the frequency, duration and timing of human use. The proposed trail is not likely to cause much change in the duration of visits, and could actually lead to improvements in habitat if use becomes less random in the Guadalupe Mountain area due to the trail's construction.

4.2.2.7 Vegetation/Noxious Weeds

No cumulative effects to vegetation or the spread of noxious weeds.

4.2.2.8 Migratory Birds

See section 4.2.2.6, Big Game Wildlife and Habitat

Chapter 5: Consultation and Coordination

5.1 Summary of Consultation and Coordination

There has been frequent collaboration between BLM staff, the mayor and administrator of the Village of Questa, and Chevron Mining Inc. personnel regarding the development of this project. Craig Saum with the Carson National Forest was consulted on trail design to minimize future maintenance costs. George Rael of Questa was consulted to determine what actions were needed to make the trail suitable for equestrian use.

5.2 Summary of Public Participation

A scoping meeting, held in the Village of Questa's Council Chambers on April 18, 2010 had six participants. The completed Environmental Assessment will be made available for a ten-day public review from July 29 through August 9, 2010

5.3 List of Preparers (all with BLM's Taos Field Office)

Joseph Leon	Wild Rivers Recreation Area – lead for trail layout and design
Aron Rael	Wild Rivers Recreation Area – lead preparer of the EA
Tami Torres	Outdoor Recreation Planner
John Bailey	Assistant Field Manager, Recreation
Brad Higdon	Planning and Environmental Coordinator
Paul Williams	Archaeologist
Valerie Williams	Wildlife Biologist

Chapter 6: References

New Mexico Department of Game and Fish

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